

# Russia's national income in war and revolution, 1913 to 1928

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*At the start of the 1920s, Russia's economy suffered the greatest economic catastrophe of a turbulent 20th century. This column argues that measuring this experience yields lessons for the relationship between state capacity, government policies, and economic development.*

In 1914, Russia joined in the First World War. With the Bolshevik Revolution of 1917 Russia's part in that war came to an end. A civil war soon began, that continued with varying intensity until 1920. It was followed immediately by a famine in 1921. Economic recovery began, but by 1928 the Russian economy had been caught up in Stalin's drive to "catch up and overtake" the West through forced-march industrialisation.

During these years we have the opportunity to observe the Russian economy going through several critical transitions, including some of the worst things that can happen to a country. There was war and civil war. The economy suffered economic disintegration, isolation, and famine. There was a collapse of state capacity; then, authority was recentralised in the hands of a new state that pursued interventionism on an unprecedented scale.

Russia's experience in these years has rich potential for lessons concerning the relationship between state capacity, government policy, and economic development. Russian economists worked on these issues until prevented by censorship and repression (Prokopovich 1917; Gukhman 1925; Groman 1927; Varzar 1955; Vainshtein 1960; Litoshenko 2001; Poletaev 1998 provides a survey). In the West, economic and social historians have studied particular events, institutions, regions, and sectors (Zaleski 1970; Malle 1985; Figes 1989; Davies 1990; Lih 1990; Adamets 2003; Gatrell 2005). But the lack of reliable, consistent, and temporally complete national accounts has limited our understanding.

Most European countries today have historical national accounts on a real GDP (final goods and services) basis stretching back through the 19th century or even earlier. Russia's go back to 1885 but, as Table 1 shows, a gap has remained between 1913 and 1928.

**Table 1. Sources for Russia's national income, 1885–1990**

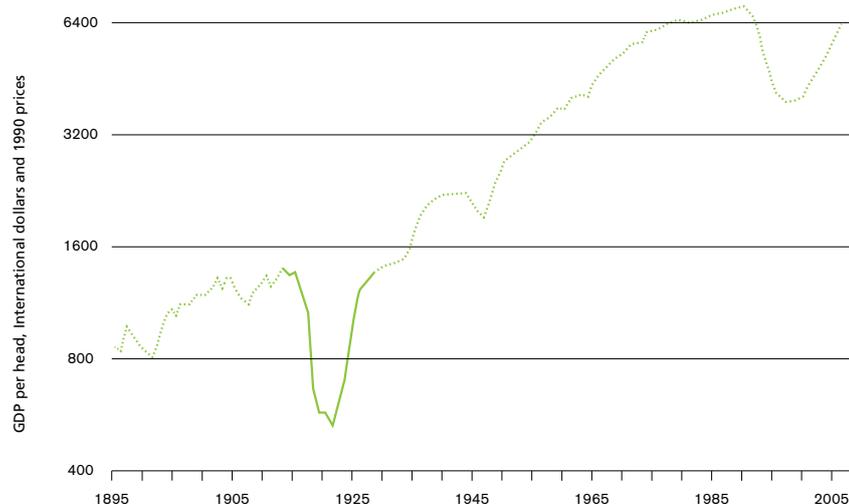
Period	Coverage	Source
1885 to 1913	Annual	Gregory (1982)
1913	Benchmarks	Falkus (1968)
1913 and 1928	Benchmarks	Gregory (1990)
1928 to 1960, selected years	Benchmarks	Bergson (1961)
1928 to 1940; 1946 to 1962	Annual	Moorsteen and Powell (1966)
1940 to 1945	Annual	Harrison (1996)
1950 to 1980	Annual	CIA (1982)
1950 to 1987	Annual	CIA (1990)
1960 to 1990	Annual	Ponomarenko (2002)

In a recent paper, Andrei Markevich and I build the first consistent annual measures of real national income in the territories of the Russian Empire (from 1913 to 1917) and the interwar Soviet Union (from 1913 to 1928) at 1913 prices (Markevich and Harrison 2011). We combine the outputs of agriculture, large and small industry, transport and construction, civilian and military services. Underlying data are plentiful and were mostly published at the time with much regional disaggregation. Their quality and coverage are uneven, however—some sectors (particularly construction and civilian services), some regions, and some years (particularly 1918) are badly served. Agricultural statistics are subject to many known biases. Everything is complicated by boundary changes. Between 1913 and 1922, Russia gave up 3% of its territory, mainly in the densely settled western borderlands; this meant the departure of one fifth of its pre-war population.

The population figures matter in their own right and as the denominator of real national income per head. Russia's demographic accounting is complicated not only by border changes but also by pre-war and wartime migrations. Pre-war rural-urban migration added complexity because the migrants were double-counted in their places of origin and destination, leading to overstatement of the total. Wartime migration interacted with border changes to increase somewhat the post-war population within Soviet frontiers. Everyone knows about the 'white' Russians who emigrated after the Revolution. Less well known is the larger flight from the contested borderlands of the Russian Empire to the interior; after the war, when the borderlands had won independence, the migrants remained on Soviet territory. After stripping out these complications, we estimate that Russia suffered 13 million premature deaths from conflict and famine. This was one in ten of the population living within the future Soviet borders in 1913.

Our work lets us observe the Russian economy collapsing and recovering from year to year between these two dates. Figure 1 shows our results (in solid red) for national income per head in the context of previously existing estimates (in dotted blue) of Russia's economic growth from 1885 to the present day.

**Figure 1. The Real GDP per head of Russia and the Soviet Union, 1885–2006**



Onto the changes in economic activity we can now map the changes in conflict (Russian defeat in World War I, then Bolshevik victory in the Civil War), state capacity (the Russian Empire collapsed and was replaced by a communist state), and the policy regime (the Russian imperial state tried to regulate the war economy rather ineffectively; the communists quickly turned to violent methods of mass mobilisation, were eventually forced to draw back, permitted the revival of a regulated market economy, and then returned to extreme coercion).

Our paper looks first at the impact of the First World War, in which Russia fought against Germany and Austria-Hungary. Initially, the war went well for Russia because Germany found itself unexpectedly tied down on the western front. Even so, Germany quickly turned back the initial Russian offensive and would have defeated Russia altogether but for its inability to concentrate forces there.

During the war nearly all the major European economies declined; Britain was the exception. The main reason was that the strains of mobilisation began to pull them apart, with the industrialised cities going in one direction and the countryside going in the other way. In that context, we find that Russia's economic performance was better than has been thought. Our study shows that until the year of the 1917 Revolution Russia's economy was declining, but by no more than any other continental power. While wartime economic trends shed some light on the causes of the Russian Revolution, they certainly do not support an economically deterministic story; if anything, our account leaves more room for political agency than previous studies.

In the two years following the Revolution, there was an economic catastrophe. By 1919, average incomes in Soviet Russia had fallen to less than 600 international dollars at 1990 prices. Less than half that of 1913, this level is experienced today only in the very poorest countries of the world, and had not been seen in Eastern Europe since the 17th century (Maddison 2001). Worse was to come. After a run of disastrous harvests, famine conditions began to appear in the summer of 1920 (in some regions perhaps as early as 1919). In Petrograd in the spring of 1919, an average worker's daily intake was below 1,600 calories, about half the level before the war. Spreading hunger coincided with a wave of deaths from typhus,

typhoid, dysentery and cholera. In 1921, the grain harvest collapsed further, particularly in the southern and eastern grain-farming regions. More than five million people may have died prematurely at this time from hunger and disease.

Because we have shown that the level of the Russian economy in 1917 was higher than previously thought, we find that the subsequent collapse was correspondingly deeper. What explains this collapse? It is natural to think of the Russian Civil War, which is usually dated from 1918 to 1920. However, we doubt that this is a sufficient explanation.

- First, although economically damaging, armed conflict between the two sides was geographically and temporally sporadic. The economic decline was most rapid in 1918; fighting was widespread only in 1919.
- Second, there are signs that Bolshevik policies of economic mobilisation and class warfare acted independently to spread chaos and decline. These policies were continued and intensified as the civil war drew to a close during 1920, and clearly contributed to the famine of 1921.

Because of the famine, economic recovery did not begin until 1922. At first, recovery was very rapid, promoted by pro-market reforms, but it slowed markedly as the Soviet government began to revert to mobilisation policies of the civil war type. We confirm that Russian incomes in 1928 were still somewhat below the level of 1913, and that recovery was lagging by international standards. For this reason, we regard the somewhat favourable view of the mobilisation policies that Allen (2003) has put forward as unduly optimistic. Moreover, some of the economic growth achieved subsequently under Stalin's five-year plans should be attributed to delayed restoration of pre-revolutionary economic capacity.

Concluding our study, we reflect on state capacity. When the state has the right amount of capacity there is honest administration within the law; the state regulates and also protects private property and the freedom of contract. When there is too little state capacity, the economic order disintegrates into robbery and violence and security ends up being privatised by gangs and warlords. When the state has too much capacity, there is still armed robbery but it is organised by the state. Somewhere between these two extremes is the right amount.

In Russian history the state has usually had either too much capacity or too little. In the short period of our study, we see Russia flipping between the two extremes. In the First World War the state did not have enough capacity to regulate the war economy and it was eventually pulled apart by competing factions. In the Civil War and again during the 1920s the state grabbed capacity back and gained powers to mobilise, build economic and military power, and starve and kill without restraint. This period shows us both the extremes of state capacity and their devastating consequences.

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